are dull, and crossed longitudinally by short shining embossed lines and dots, unlike those of any known species of this genus. Length 28–42 millim., width 14–21 millim.

Sumatra (*Carl Bock*). Type, B.M.

From three dried examples in the collection.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

January 25, 1882.—R. Etheridge, Esq., F.R.S., President, in the Chair.

The following communications were read:—

1. "On the Fossil Fish-remains from the Armagh Limestone in the Collection of the Earl of Enniskillen." By James W. Davis, Esq., F.G.S., F.L.S.

The author described in this paper a large collection of fossil fish-remains at present at Florence Court, Enniskillen, but which will soon be removed to the new Natural History Museum in the Cromwell Road. The collection comprises, besides specimens collected by the Earl of Enniskillen from the Carboniferous Limestone of Armagh, a large series acquired from the famous collection of the late Captain Jones, M.P., the remaining portion of which is in the Geological Museum of Cambridge. Several genera and species were described by Prof. Agassiz in his 'Recherches sur les Poissons Fossiles' (1833–43), and again referred to by J. E. Portlock, F.R.S., in his 'Report of the Geology of Londonderry and parts of Tyrone and Fermanagh' (1843).

In 1854 Prof. M'Coy described many new genera and species in his work on the British Palæozoic Rocks and Fossils, principally derived from a study of the portion of Capt. Jones's collection deposited in the Cambridge Museum. Prof. Agassiz paid a visit to Florence Court in 1858, and appended names to some of the fossil teeth in Lord Enniskillen's cabinets, intending to describe and figure the new forms, and to revise the whole of his former work. His death prevented this intention from being carried into effect. As far as possible the determinations of Prof. Agassiz have been adhered to in the present paper.

The detached and isolated condition in which the remains are found renders any appreciation of the relationship of the teeth and spines, or even of the teeth only, to each other extremely uncertain and difficult. Some speculations as to the probable organization and characteristics of the Carboniferous fishes which they represent, evolved during a long consideration of the specimens, have therefore been postponed to a future opportunity.

The following is a list of the genera and species described in the paper :—

Ctenacanthus plicatilis, C. dubius, C. lævis, C. pustulatus, C. tuberculatus, Compsacanthus carinatus, Cosmacanthus marginatus, C. carinatus, Lispacanthus retrogradus, Cladacanthus paradoxus, C. major, Gnathacanthus triangularis, Cladodus polyodon, C. curvus, C. destructor, Carcharopsis Colei, Copodus cornutus, C. furcatus, C. spatulatus, C. minimus, Lobodus prototypus, L. planus, Mesogomphus lingua, Pleuragomphus auriculatus, Rhymodus transversus, R. oblongus, Characodus angulatus, C. lineatus, Pinacodus gonoplax, P. gelasi, Dimyleus Woodi, Mylax batoides, Mylacodus quadratus, M. Sesarma, Homalodus trapeziformis, H. quadratus, Petalodus quadratus, P. recurvus, P. inequilateralis, Polyrhizodus magnus, P. Colei, P. elongatus, P. sinuosus, P. attenuatus, P. constrictus, Chomatodus linearis, C. acutus, Glossodus marginatus, Harpacodus dentatus, H. clavatus, Streblodus oblongus, S. Colei, S. Egertoni, Deltodus sublævis, D. expansus, D. nobilis, Deltoptychius acutus, D. gibberulus, Sandalodus Morrisii, Psephodus magnus, Pœcilodus Jonesii, P. gibbosus, Tomodus convexus, Xystrodus striatus, X. angustus, X. Egertoni, Helodus crassus, H. tenuis, H. clavatus, H. dilatatus, H. acutus, H. richmondensis, H. triangularis, H. biconus, H. expansus, Rhamphodus dispar, Petalorhynchus psittacinus, Pristodus falcatus.

2. "On an extinct Chelonian Reptile (*Notochelys costata*, Owen) from Australia." By Prof. Owen, C.B., F.R.S., F.G.S.

The fossil reptilian remains hitherto transmitted to the author from Australia have been limited to parts of the skeleton of *Megalania prisca*, Ow. The present specimen, sent last year by Prof. Liversedge, is the first fossil Chelonian. The specimen was found in a formation at Blinder's River, Queensland, of which the nature and age are not stated. It is, however, petrified. The fossil consists of the anterior portion of the carapace and of the plastron, brought into unnaturally close contact by posthumous pressure. A minute description of the several parts was given, from which the author concluded that though the characters of the carapace might be interpreted as identifying the Chelonian with a true turtle (*Chelone*), those of the plastron show the well-marked distinctions of *Trionyx* and *Chelys*. On the whole, however, the modifications, especially of the carapace, show a nearer affinity to the marine turtles (*Chelone*) than the known Chelydrians exhibit, and indicate a more generalized type.

February 8, 1882.—R. Etheridge, Esq., F.R.S.,
President, in the Chair.

The following communications were read :—

1. "Description of some Iguanodon Remains discovered at Brook, Isle of Wight, indicating a new Species, *Iguanodon Seelyi*." By J. W. Hulke, Esq., F.R.S.

After referring to the *Iguanodon* remains preserved in the

Brussels Natural-History Museum, the author described some fossils obtained by him in 1870 from a bed between the red and purple clays and the flint gravel capping the cliff in Brook Bay. The ilium, when complete, was not less than 124 centim. long, with a maximum vertical extent of 33 centim. The dorsal border is stout, and slightly overhangs the outer surface. The præacetabular process is relatively short; and the postacetabular part of the bone tapers more than in Mantell's *Iguanodon*. The femur, when entire, could not have been less than 108 centim. long; the girth of the condyles is 82 centim., and their breadth 32 centim.; the tibia is shorter than the femur. Both metatarsi demonstrate the existence of but three functional toes; the middle metatarsal is the longest, attaining 35·5 centim., the outer metatarsal 29 centim., and the inner 26 centim.; the inner toe has three phalanges, the middle four, and the outer toe five. The toes of the *Iguanodon* therefore correspond to the second, third, and fourth toes of *Hypsilophodon*. The ungual phalanx of the inner toe is 17 centim. long, that of the middle toe nearly 18 centim. long, and that of the outer toe about 15·5 centim. long.

The humerus is about 10 centim. long. Its proximal end has a well-developed posterior or inner process, and a large deltoid crest. The caudal vertebræ, three probably between the 4th and the 10th in this series, have very four-sided articular surfaces suggestively like those hitherto referred to *Pelorosaurus*. The chevron bones are very stout and long. The differences in their ilia show this and Mantell's *Iguanodon* to be specifically distinct; and with this new *Iguanodon* the author connected the name of C. Seely, Esq., M.P., of Brook House, in recognition of his courteous permission to excavate the cliff for the recovery of the fossils, naming it *Iguanodon Seelyi*.

2. "On a peculiar Bed of Angular Drift on the high Lower-Chalk Plain between Didcot and Chilton." By Prof. J. Prestwich, M.A., F.R.S., F.G.S.

In making a railway from the main line to Chilton, this bed of drift was cut through for a distance of about $1\frac{1}{4}$ mile. It lies on a flat plain extending from the foot of the escarpment of Upper Chalk to the top of that of Lower Chalk. In places it is full 28 feet thick. At first a fine chalk rubble, it becomes after a while coarse, and is divided by clay-beds into an upper and a lower deposit. Here small boulders and bones occur, the latter much shattered; but *Elephas primigenius*, *Rhinoceros tichorhinus* (?), *Bison priscus*, *Cervus tarandus*, *Equus*, &c. have been identified. The boulders are Sarsen-stone; and there are small fragments of flint. Shells of *Pupa marginata*, *Helix hispida*, and *H. pulchella* have been found. The drift (which is widely spread) is from 150 to 260 feet above the Thames; at highest 407 feet above the sea. The author compares it to the rubble-beds overlying the raised beaches of Sangatte and Brighton. It is unconnected with any river-course, is not of marine origin, and its materials, where not local, are derived from the southward.